3

4

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signals.

CLAIMS

We Claim:

1	1. A method for graphically presenting multiple signals, comprising
2	the following step:
3	(a) separately representing on a display a signal for each measured
4	frequency channel, including the following substep:
5	(a.1) superimposing representations of the signals, including
6	the following substeps:
7	(a.1.1) aligning center channel frequencies for all the
8	representations of the signals relative to a single position on a first axis, and
9	(a.1.2) indicating, for all the representations of the
10	signals, amplitude relative to a second axis.
1	2. A method as in claim 1 additionally comprising the following step:
2	(b) displaying a line, intersecting the single position on the first axis,

3. A method as in claim 1 additionally comprising the following step:

that indicates the center channel frequency for all the representations of the

- 2 (b) displaying a mask that indicates when values for the signals are
- 3 outside channel frequency limits and that indicates when values for the
- 4 signals are outside channel amplitude limits.
- 1 4. A method as in claim 1 additionally comprising the following steps:

2	(b) displaying a mask that indicates when values for the signals are
3	outside channel frequency limits and that indicates when values for the
4	signals are outside channel amplitude limits; and,
5	(c) using margin from the mask as a tool to measure the quality of
6	signals.

- 5. A method as in claim 1 additionally comprising the following steps:
- 2 (b) displaying a mask that indicates when values for the signals are
 3 outside channel frequency limits and that indicates when values for the
 4 signals are outside channel amplitude limits; and,
- 5 (c) counting mask hits as a tool to measure the quality of signals.
- 6. A method as in claim 1 wherein substep (a.1) additionally includes the following substep:
- (a.1.3) using pixel color to indicate how many representations of the
 signals overlap each pixel.
- 7. A method as in claim 1 wherein substep (a.1) additionally includes the following substep:
- 3 (a.1.3) using shades of gray to indicate how many representations of 4 the signals overlap each pixel.
- 8. A method as in claim 1 wherein substep (a.1) additionally includes the following substep:

3	(a.1.3) using shades of color to indicate how many representations of
4	the signals overlap each pixel.

- 9. An instrument that measures multiple signals, comprising:
- 2 a display; and,
- 3 an analyzer that separately represents on the display a signal for each
- 4 measured frequency channel, wherein representations of the signals are
- 5 superimposed so that center channel frequencies for all the representations
- 6 of the signals are aligned relative to a single position on a first axis, and so
- 7 that for all the representations of the signals, amplitude is indicated relative
- 8 to a second axis.
- 1 10. An instrument as in claim 9 wherein the analyzer additionally
- 2 represents on the display a line intersecting the single position on the first
- 3 axis, the line indicating the center channel frequency for all the
- 4 representations of the signals.
- 1 11. An instrument as in claim 9 wherein the analyzer additionally
- 2 represents on the display a mask that indicates when values for the signals
- 3 are outside channel frequency limits and that indicates when values for the
- 4 signals are outside channel amplitude limits.
- 1 12. An instrument as in claim 9 wherein the analyzer additionally
- 2 represents on the display a mask that indicates when values for the signals
- 3 are outside channel frequency limits and that indicates when values for the

- 4 signals are outside channel amplitude limits, margins from the mask being
- 5 used as a tool to measure the quality of signals.
- 1 13. An instrument as in claim 9 wherein the analyzer additionally
- 2 represents on the display a mask that indicates when values for the signals
- 3 are outside channel frequency limits and that indicates when values for the
- 4 signals are outside channel amplitude limits, mask hits being counted as a
- 5 tool to measure the quality of signals.
- 1 14. An instrument as in claim 9 wherein pixel color on the display
- 2 indicates how many representations of the signals overlap each pixel.
- 1 15. An instrument as in claim 9 wherein shades of gray of pixels on
- 2 the display indicate how many representations of the signals overlap each
- 3 pixel.
- 1 16. An instrument as in claim 9 wherein shades of color to indicate
- 2 how many representations of the signals overlap each pixel.
- 1 17. A method for measuring multiple signals, comprising the
- 2 following steps:
- 3 (a) representing on a display a signal for each measured frequency
- 4 channel; and,
- 5 (b) displaying masks that indicate when values for the signals are
- 6 outside channel frequency limits;

- 1 18. A method as in claim 17 wherein in step (b) the displayed masks
- 2 also indicate when values for the signals are outside channel amplitude
- 3 limits.
- 1 19. A method as in claim 17 additionally comprising the following
- 2 step:
- 3 (c) using margin from the mask as a tool to measure the quality of
- 4 signals.
- 1 20. A method as in claim 17 additionally comprising the following
- 2 step:
- 3 (c) counting mask hits as a tool to measure the quality of signals.